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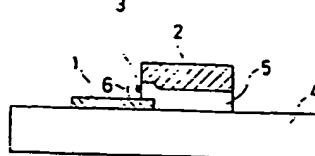
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(54) Electron-emitting device.

(57) An electron-emitting device is provided which comprises a laminate comprising an insulating layer (5) held between a pair of electrodes (1,2) opposing each other, wherein an electron-emitting region (3) insulated from said electrodes is formed at a side end surface of the insulating layer (5) formed at the part at which the electrodes oppose each other, and electrons are emitted from said electron-emitting region (3) by applying a voltage between said elec-

trodes. A method for preparing the electron-emitting device is also provided.

FIG.1





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DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	<u>SU - A - 855 782</u> (PETROV)	1, 28, 29, 30, 31
Y	& SOVIET INVENTIONS ILLUSTRATED, section El, week E22, 14 July 1982 DERWENT PUBLICATIONS LTD., London, V05 * SU-855 782 (PETROV) *	51
A	---	3, 4, 6, 7, 10, 13, 15, 16, 19, 32, 59
D, X	M. HARTWELL "Strong electron emission from patterned tin-indium oxide thin films" 1975, IEEE Trans. ED Conf., Cambridge pages 519-521 * Page 519 *	3
D, A	---	4, 7, 10, 13, 16, 19
A	<u>DE - B2 - 2 413 942</u> (HITACHI) * Column 3, lines 4-7, 13-19; column 4, lines 1-18; claims 7, 8 *	4, 6, 10, 12, 18
A	PATENT ABSTRACTS OF JAPAN, unexamined applications, E field, vol. 5, no. 66, May 2, 1981 THE PATENT OFFICE JAPANESE GOVERNMENT page 164 E 55 * Kokai-no. 56-18 336	4, 10, 16
The present search report has been drawn up for all claims		
Place of search VIENNA		Date of completion of the search 25-09-1989
		Examiner BRUNNER
CATEGORY OF CITED DOCUMENTS		
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		



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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
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Y	<u>DE - B - 1 800 952</u> (SIEMENS) * Totality *	51	
A	--	4, 5, 10-12, 17, 18, 65	
A	<u>US - A - 3 278 789</u> (SHROFF) * Column 2, lines 34-39 *	4, 6, 10, 12, 18	TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
A	<u>DE - B1 - 2 542 349</u> (SIEMENS) * Column 1, lines 54-58 *	4, 6, 10, 12, 18	
A	<u>DE - B2 - 2 012 101</u> (MATSUSHITA ELECTRIC INDUSTRIAL) * Column 2, line 67 - column 3, line 20; column 4, line 64 - column 5, line 1 *	4, 6, 8- 10, 12, 18	
A	<u>GB - A - 1 267 029</u> (PHILIPS) * Page 1, lines 35-48; claims *	4, 6, 7, 10, 12, 13, 15, 16, 19	
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 25-09-1989	Examiner BRUNNER
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		T : theory or principle underlying the invention	
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P : intermediate document		& : member of the same patent family, corresponding document	



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DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.)
Category	Citation of document with indication, where appropriate, of relevant passages		
D, A	M.I.ELINSON "The Emission of Hot Electrons and the Field Emission of Electrons from Tin Oxide", vol. 10, 1965, RADIO ENG. and ELECTRON PHYSICS" pages 1290-1296 * Page 1290; abstract * --	4, 10, 13, 16, 19	
A	EP - A2 - 0 073 031 (BATTELLE-INSTITUT) * Page 5, lines 8-17; claims 1-14 * --	1, 6, 12, 18, 32, 61	
X	US - A - 3 735 186 (KLOPFER) * Column 1, line 42 - column 2, line 47; claims 1-6 *	49	
A	--	43, 44	
X	DE - A - 1 764 994 (WESTERN ELECTRIC) * Fig. 1; claims 1-4 *	61, 62	TECHNICAL FIELDS SEARCHED (Int. Cl.)
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A	GB - A - 1 335 979 (GENERAL ELECTRIC) * Fig. 2; page 2, lines 76-111 *	5, 9, 61	
The present search report has been drawn up for all claims			
Place of search VIENNA	Date of completion of the search 25-09-1989	Examiner BRUNNER	
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